

Week-8
LAB-4.

```
import java.util.Scanner;
```

```
abstract class Shape {
```

```
    double d1;
```

```
    double d2;
```

```
    Shape(double a, double b) {
```

```
        d1 = a;
```

```
        d2 = b;
```

```
    }
```

```
    abstract void printarea();
```

```
}
```

```
class Rectangle extends Shape {
```

```
    Rectangle(int a, int b) {
```

```
        super(a, b);
```

```
    }
```

```
    void printarea() {
```

```
        double area = d1 * d2;
```

```
        System.out.println("Area of rectangle: " + area);
```

```
    }
```

```
}
```

```
class Triangle extends Shape {
```

```
    Triangle(int a, int b) {
```

```
        super(a, b);
```

```
    }
```

```
    void printarea() {
```

```
        double area = d1 * d2 / 2;
```

```
        System.out.println("Area of triangle: " + area);
```

```
    }
```

```
}
```

```
class Circle extends Shape {
```

```
    circle(double rad) {
```

```
        super(rad, rad);
```

```
    }
```

```
    void printArea() {
```

```
        double area = 3.14 * d1 * d1;
```

```
        System.out.println("Area of circle: " + area);
```

```
    }
```

```
}
```

```
class Main {
```

```
    public static void main (String args[]) {
```

```
        Scanner xx = new Scanner (System.in);
```

```
        for (;;) {
```

```
            System.out.println("Enter ur choice");
```

```
            System.out.print("n1: rectangle \n2: triangle  
n3: circle \n");
```

```
            int ch = xx.nextInt();
```

```
            switch (ch) {
```

```
                case 1: System.out.println("Enter breadth &  
length of rectangle");
```

```
                    int x = xx.nextInt();
```

```
                    int y = xx.nextInt();
```

```
                    Rectangle r = new Rectangle (x, y);
```

```
                    r.printArea();
```

```
                    break;
```

```
                case 2: System.out.println("Enter base &  
height of triangle");
```

```
                    int z = xx.nextInt();
```

```
                    int w = xx.nextInt();
```



```
Triangle t = new Triangle(z, w);  
t.printArea();
```

```
break;
```

```
Case 3 : System.out.println("Enter radius of  
circle");
```

```
double rad = xx.nextInt();
```

```
circle c = new circle(rad);
```

```
c.printArea();
```

```
break;
```

```
}
```

```
}
```

```
}
```

```
}
```

Week-8
LAB-5

```
import java.util.Scanner;
abstract class Account {
    String cName, accType;
    long accNo;
    double bal;
    final double minBal = 100000;
    Account(String cName, long accNo, double bal,
            String accType) {
        this.accNo = accNo;
        this.cName = cName;
        this.bal = bal;
        this.accType = accType;
    }
    abstract void addBal(double amt);
    abstract void dispBal();
    abstract void withBal(double amt);
}
```

class curr-acct extends Account {

```
    curr-acct(String cName, long accNo, double bal) {
        super(cName, accNo, bal, "current");
        System.out.println("Name: " + cName + "\n"
            + "accNo: " + accNo + "bal: "
            + bal + "type: " + accType);
    }
```

```
    void addBal(double amt) {
        this.bal += amt;
    }
```

```
    void display() {
        System.out.println("Your Balance is: " + this.bal);
    }
}
```



```
void withBal(double amt){
```

```
    this.bal -= amt;
```

```
    checkBal();
```

```
}
```

```
void checkBal(){
```

```
    if (this.Bal < minBal){
```

```
        this.bal += this.bal * 0.02;
```

```
        System.out.println("Avail. Balance : " + this.bal);
```

```
    }
```

```
}
```

```
}
```

```
class Sav-acct extends Account{
```

```
    Sav-acct(String ename, long accno, double bal){
```

```
        super(ename, accno, bal, "Savings");
```

```
}
```

```
void addBal(double amt){
```

```
    this.bal += amt;
```

```
    addInt();
```

```
}
```

```
void addIntx(){
```

```
    this.bal += this.bal * 0.07;
```

```
}
```

```
void dispbal(){
```

```
    System.out.print("balance : " + this.bal);
```

```
}
```

```
void withBal(double amt){
```

```
    this.bal -= amt;
```

```
}
```

```
}
```

```

class Circle extends Shape {
    circle(double rad) {
        super(rad, rad);
    }
    void printArea() {
        double area = 3.14 * d1 * d1;
        System.out.println("Area of circle: " + area);
    }
}

```

```

class Main {
    public static void main (String args[]) {
        Scanner xx = new Scanner (System.in);
        for (;;) {
            System.out.println("Enter ur choice");
            System.out.print("n1: rectangle \n2: triangle\n3: circle\n");
            int ch = xx.nextInt();
            switch (ch) {
                case 1: System.out.println("Enter breadth & length of rectangle");
                    int x = xx.nextInt();
                    int y = xx.nextInt();
                    Rectangle r = new Rectangle (x, y);
                    r.printArea();
                    break;
                case 2: System.out.println("Enter base & height of triangle");
                    int z = xx.nextInt();
                    int w = xx.nextInt();

```